NID File ✓

Location Map Pinned ..... Checked by Chief .....

Card Indexed ✓..... Approval Letter .....

Disapproval Letter .....

COMPLETION DATA:

Date Well Completed ..... Location Inspected .....

WW..... TA..... Bond released

OS..... PA..... State or Fee Land .....

LOGS FILED

Driller's Log.....

Electric Logs (No.) .....

..... I..... Dual I Lat..... GR-N..... Micro.....

CRC Sonic GR..... Lat..... Mi-L..... Sonic.....

CBLog..... CCLog..... Others.....

Form DOGC-1a

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well
Oil Well [ ] Gas Well [ ] Other Wildcat Single Zone [ ] Multiple Zone [ ]

2. Name of Operator
AMOCO PRODUCTION COMPANY

3. Address of Operator
501 AIRPORT DRIVE, FARMINGTON, NEW MEXICO 87401

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface
Approximate center of SE/4 SW/4 Section 23, T-8-N, R-8-W

At proposed prod. zone

5. Lease Designation and Serial No.
ML28640

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name
State of Utah "D"

9. Well No.
1

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area
SE SW Section 23
T-8-N R-8-W

14. Distance in miles and direction from nearest town or post office*
Salt Lake City

12. County or Parrish
Box Elder

13. State
Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)
660

16. No. of acres in lease
2560

17. No. of acres assigned to this well
Wildcat

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.
NONE

19. Proposed depth
3500'

20. Rotary or cable tools
Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
Lake Elevation 4199

22. Approx. date work will start*
May, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
	20"	94#	100'	Drive Pipe
17-1/2	13-3/8"	48#	500'	Circulate to Surface
8-3/4	7"	26#	3500'	To be determined upon logging. Cement to cover pay and aquifers.

Well to be drilled in the Great Salt Lake at a location where the water depth is approximately 20' of water. The drilling contractor will be designated in advance of drilling operations, but is unknown at present. Current plans are to employ one rotary rig to complete the exploration program on the lake. This well is over four miles from shore and is over 1 mile from any evaporation pits structures, buildings, platforms, producing well, State or Federal waterfowl areas. The well will be drilled in compliance with the State of Utah operating rules and regulations governing drilling procedures in the Great Salt Lake adopted July 18, 1973. An oil spill contingency plan will be submitted for approval prior to drilling.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed L. O. Lewis 505-325-8841 Title Area Superintendent Date 12/2/77

(This space for Federal or State office use)

Permit No. ..... Approval Date .....

Approved by ..... Title ..... Date .....
Conditions of approval, if any:

*See Instructions On Reverse Side

COMPANY Amoco Production Company

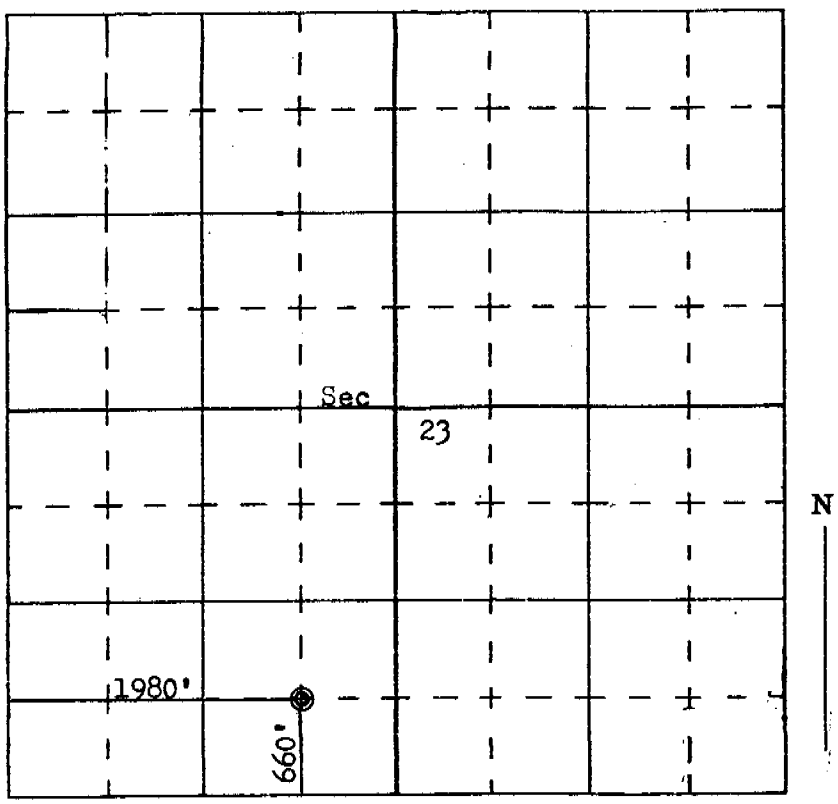
LEASE State of Utah "D" WELL NO. 1

SEC. 23, T. 8N, R. 8W U.S.M.

Box Elder County, Utah

LOCATION 660'FSL 1980'FWL

ELEVATION



SCALE—4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

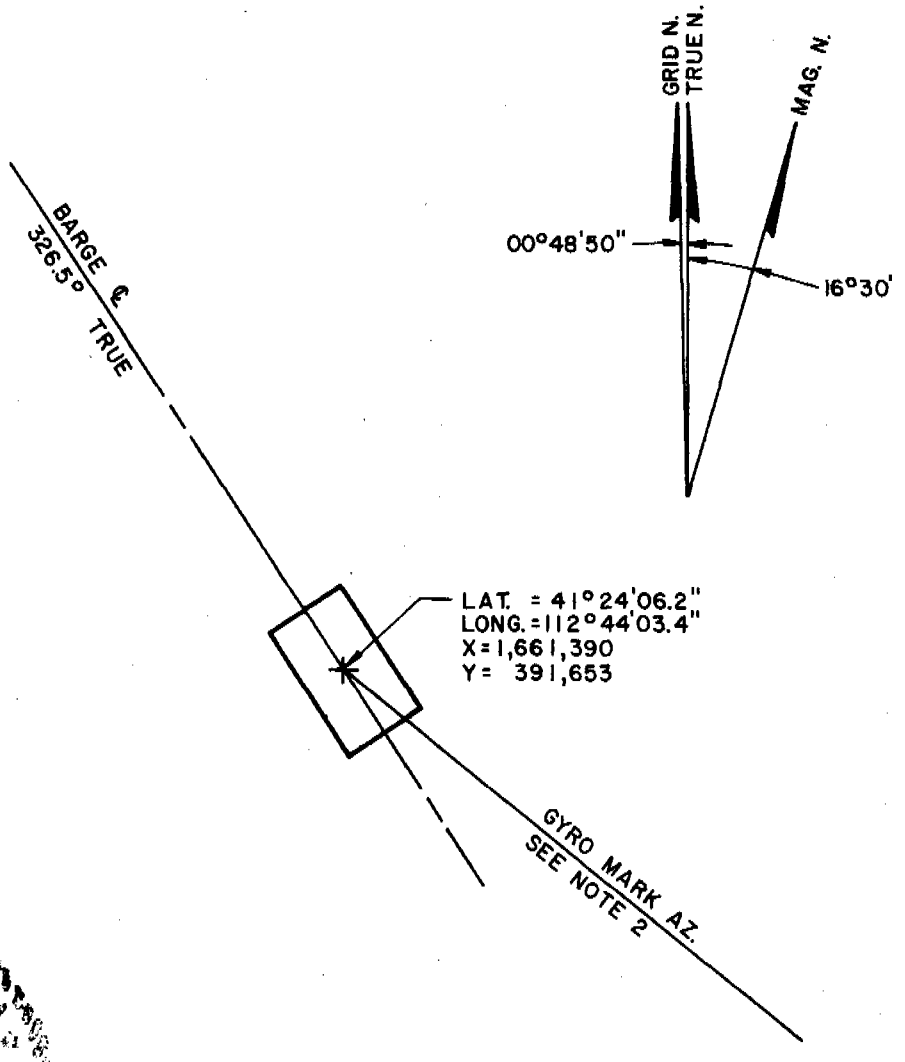
Fred B. Kerr Jr.

SEAL: Registered Land Surveyor.

#3950

SURVEYED November 16, 19 77

FARMINGTON, N. M.



29 Nov. 1978

Reference: State of Utah Laws regulating the practices of Professional Engineers, Land Surveyors and Engineers in Training section 58-22-21.

NOTES:

1. Coordinates are Utah State Plane, North Zone.
2. Gyro mark "A" is the western most light on the north face of the light house tower at the Little Valley Harbor. Az. from barge 128° 40' true. Gyro mark "B" is the highest and northern most hill in a cluster of three hills directly above the camp at Little Valley Harbor as viewed from barge. Az. from barge 128° 30' true.
3. Coordinates are for derrick vertical ℄.

Date of Survey - Nov. 24, 1978 No Scale

AMOCO No. 1 STATE OF UTAH "D"

DRILL BARGE LOCATION

For

AMOCO PRODUCTION CO.

Farmington, New Mexico

Surveyed by

F. M. LINDSEY & ASSOC.

LAND & HYDROGRAPHIC SURVEYORS

2502 West Northern Lights Boulevard Box 4-081

Anchorage Alaska

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: Dec 6, 1977

Operator: Amoco Oil Prod. Co.

Well No: State "D" #1

Location: Sec. 23 T. 8N R. 7W County: Box Elder

File Prepared: /✓/ Entered on N.I.D.: /✓/

Card Indexed: /✓/ Completion Sheet: /✓/

API NUMBER: 43-003-30003

CHECKED BY:

Administrative Assistant _____

Remarks:

Petroleum Engineer _____

Remarks: Amoco State #1 will be drilled in accordance with Rules promulgated under C-1

Director _____

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: /___/ Survey Plat Required: /___/

Order No. 150-2 /✓/ Surface Casing Change /___/
to _____

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site /___/

O.K. Rule C-3 /✓/ O.K. In _____ Unit /___/

Other:

/✓/ Letter Written/Approved

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

December 9, 1977

AMOCO PRODUCTION COMPANY
501 Airport Drive
Farmington, New Mexico 87401

RE: State of Utah "D" #1, Sec. 23, T. 8 N, R. 8 W, Box Elder County
State of Utah "E" #1, Sec. 19, T. 3 N, R. 4 W, Davis County
State of Utah "F" #1, Sec. 15, T. 3 N, R. 5 W, Tooele County
State of Utah "G" #1, Sec. 29, T. 3 N, R. 5 W, Tooele County
State of Utah "H" #1, Sec. 11, T. 3 N, R. 6 W, Tooele County
State of Utah "I" #1, Sec. 23, T. 7 N, R. 7 W, Box Elder County

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to wells is hereby granted in accordance with the Order issued in Cause No. 150-2, dated November 20, 1974; and, the "Operating Rules and Regulations Governing Drilling Procedures in the Great Salt Lake", adopted July 18, 1973, by the Board of Oil, Gas, and Mining.

However, said approval shall be contingent upon the following:

1) The blowout prevention equipment being tested by an independent source after initial installation on all of the above wells;
2) Notification as to the name of the drilling contractor and the number and type of rig to be used prior to commencement of spudding operations;
3) The filing of an "Oil Spill Emergency Contingency Plan"
4) A drilling and plugging bond being filed with the Division of State Lands prior to commencement of operations.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

OR

BRIAN W. BUCK - Engineering Geologist
HOME: 359-0214
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Finally, it is requested that this Division be notified at least 48 hours prior to spudding.

The API numbers assigned to these wells are:

"D" #1:	43-003-30003	"E" #1:	43-011-30002
"F" #1:	43-045-30004	"G" #1:	43-045-30005
"H" #1:	43-045-30006	"I" #1:	43-003-30002

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Cleon B Feight

CLEON B. FEIGHT
Director

/sw
cc: Division of State Lands

Form OGC-1b

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.: M L 28640

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER Wildcat

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

8. FARM OR LEASE NAME: State of Utah "D"

3. ADDRESS OF OPERATOR: 501 Airport Drive Farmington New Mexico 87401

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: Center of NW/4 SW/4 Section 23, T-8-N, R-8-W

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NW SW Section 23, T-8-N R-8-W

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): Lake Elevation 4199'

12. COUNTY OR PARISH: Box Elder

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☒	(Other)			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

This is to advise of location, total depth and casing program change for Amoco's proposed Wildcat well, the State of Utah "D" No. 1. The proposed well total depth has been changed from 3500' to 8000'. The proposed well location has been changed from C SE SW Section 23, T-8-N, R-8-W to C NW SW Section 23, T-8-N, R-8-W. Water depth at the new location is approximately 20' feet. A revised plat is attached. Our revised casing program is as follows:

	Hole Size	Csg Size	Wt/Ft	Setting Depth	Cmt. Vol
Conductor:	Driven	20"	94#	500'	Drive pipe
Surface:	12-1/4"	9-5/8"	36#	3000'	Circ. to surf.
Production:	8-1/2"	7"	23-26#	8000'	To be determined from logs. Cmt. to cover pay and aquifers.

The revised casing program was verbally approved per telephone conversation Speer to Feight on September 26, 1978.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 10-2-78
BY: C.B. Feight

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Area Superintendant DATE September 28, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

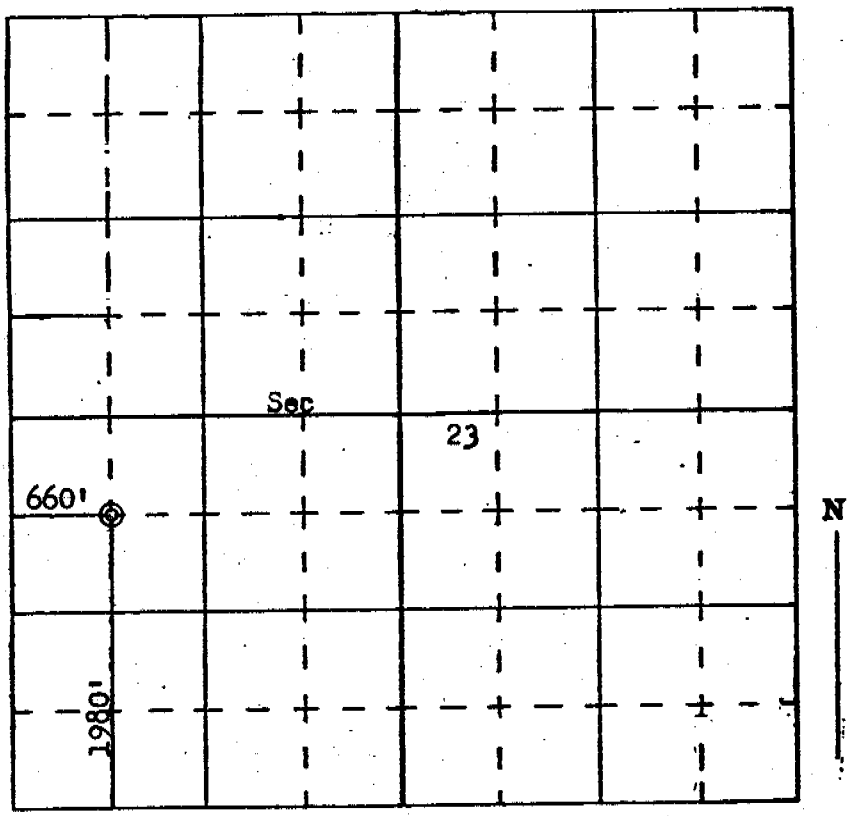
COMPANY AMOCO PRODUCTION COMPANY

LEASE STATE OF UTAH "D" WELL NO. 1

SEC. 23, T. 8N, R. 8W
BOX ELDER COUNTY, UTAH

LOCATION 1980'FSL 660'FWL

ELEVATION 4199 (Lake level)



SCALE—4 INCHES EQUALS 1 MILE

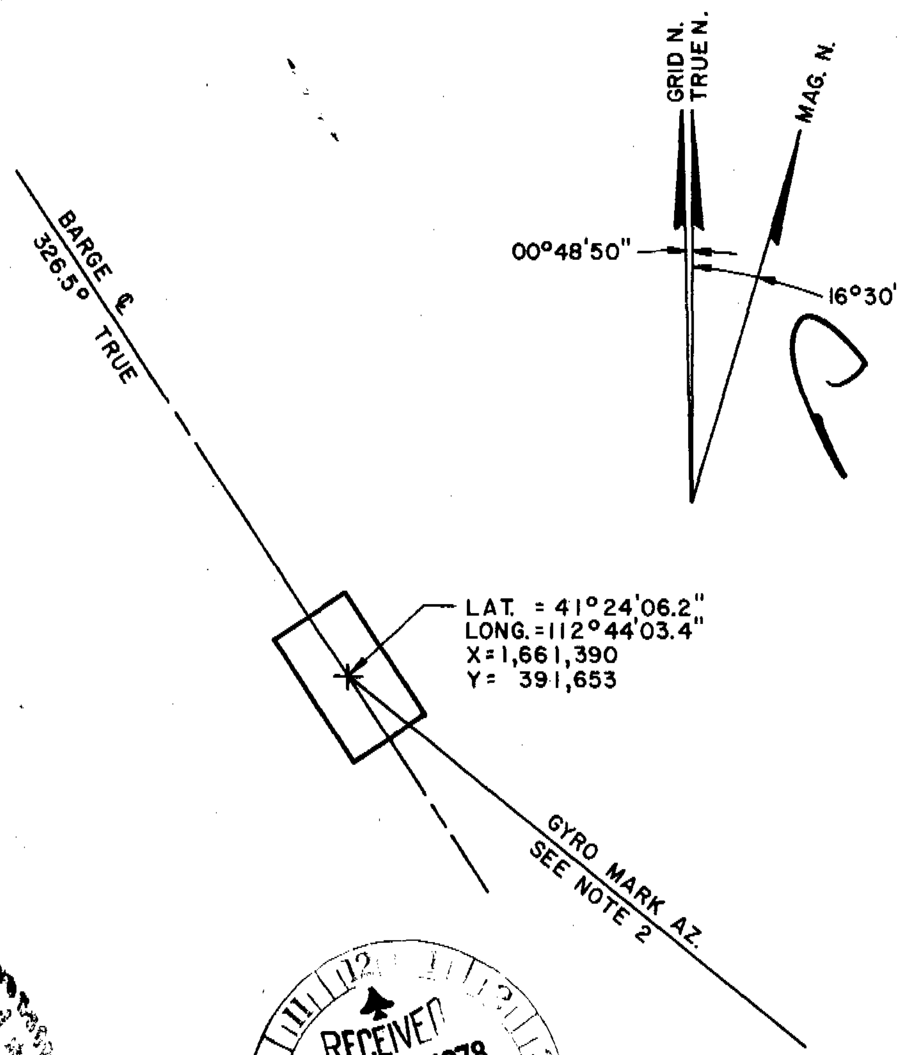
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Fred B. Kerr Jr.

SEAL: Registered Land Surveyor.
#3950

SURVEYED September 29, 19 78

FARMINGTON, N. M.



STATE OF ALASKA
49TH
Louis John Epps
Louis J. Epps
NO. 3510-S
REGISTERED PROFESSIONAL LAND SURVEYOR

RECEIVED
DEC 14 1978
DIVISION OF
GAS, & MINING

29 Nov. 1978

Reference: State of Utah Laws regulating the practices of Professional Engineers, Land Surveyors and Engineers in Training section 58-22-21.

NOTES:

1. Coordinates are Utah State Plane, North Zone.
2. Gyro mark "A" is the western most light on the north face of the light house tower at the Little Valley Harbor. Az. from barge 128° 40' true. Gyro mark "B" is the highest and northern most hill in a cluster of three hills directly above the camp at Little Valley Harbor as viewed from barge. Az. from barge 128° 30' true.
3. Coordinates are for derrick vertical ℄.

Date of Survey - Nov. 24, 1978 — No Scale

AMOCO No. 1 STATE OF UTAH "D"

DRILL BARGE LOCATION

For

AMOCO PRODUCTION CO.

Farmington, New Mexico

Surveyed by

F. M. LINDSEY & ASSOC.

LAND & HYDROGRAPHIC SURVEYORS

2502 West Northern Lights Boulevard Box 4-081

Anchorage Alaska

CONFIDENTIAL

February 7, 1979

MEMO TO FILE

43-003-30003

Re: AMOCO PRODUCTION COMPANY
Well No. State "D" #1
Sec. 23, T. 8N, R. 8W
Box Elder County, Utah

A call was received from Amoco Production Company relative to the drilling of this second well on the Great Salt Lake. It had been drilled to a total depth of 8,513' when the hole for all practical purposes, was lost. An attempt to reach this depth resulted in a new hole being made from 6,240' on. Amoco does not want to pursue a redrill program, and as such, requests permission to plug this well back to 2,700' in order to test some heavy oil shows.

The plugging program consists of a 200' cement plug from 6,200'-6,000' and a balancing plug from 4,400'-4,600'. The third plug will be set from 2,700-2,900'. The completion attempt will be from 2,700'-2,500'.

Verbal permission has been granted

PATRICK L. DRISCOLL
CONSULTANT

PLD/lw

Confidential

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED FEB 14 1979 DIVISION OF OIL, GAS, & MINING

5. LEASE DESIGNATION AND SERIAL NO.: M L 28640

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☐ OTHER Wildcat

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: State of Utah "D"

3. ADDRESS OF OPERATOR: P. O. Box 17675 Salt Lake City

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: C-NW/4, SW/4, Section 23, 660' FWL 1980' FEL

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 23, T8N, R8W

14. PERMIT NO.: 43-003-30003

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4199' Lake Elevation 4223' RKB

12. COUNTY OR PARISH: Box Elder

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Plug back			x	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Operations commenced 11/24/78, drove 20" Conductor pipe to 362' spud with Rotary Rig 11/26/78, drilled 12¼" hole to 2837 and set 9 5/8" 36# K-55 Sufrace casing @ 2819'. Cemented w/1400 sx Lite and 800 sx Cl "G" (no returns to surface.) Commenced drilling 8 3/4" hole to 6985' and lost bit drilling jars, 20 drill collars, 2 jts. drill pipe and 27' sub. Unable to retrieve, top of junk @ 6219 set 500 sx cement plug @ 6205', kicked off and drilled to 8500.

Propose to plug back to approximately 2700' and to continue testing zones above 2600'
Plugs back to be completed as described below:

Set 200 sx cement plug 6000'-6200'
Set 60 sx cement plug 4400'-4500'
Set 120 sx cement plug 2700'-2900'

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 2-20-79
BY: M. J. M.

Verbal approval granted by Pat Driscoll of the State of Utah Department of Natural Resources, Division of Oil, Gas, and Mining to J. E. Stepinski on 2/4/79 @ 1:50 P. M.

NOTE: Please do not release the information provided above immediately as Amoco regards subject well as a Tight Hole. This information should only be released publicly in accordance with your provision to release confidential information only after 7 months elapses from date of well completion.

18. I hereby certify that the foregoing is true and correct

SIGNED J. E. Stepinski TITLE Dist. Adm. Supervisor DATE 2-12-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

****

****
* TDT ANALYSIS *
****
* SCHLUMBERGER *
****

COMPANY AMOCO PRODUCTION COMPANY

WELL STATE OF UTAH "D" NO. 1

FIELD WILDCAT
COUNTY BOUTAH ELDER

STATE UTAH

DATE 2-14-79

TDT LOGGED 2-5-79

COMPUTED AT:- ROCKY MOUNTAIN COMPUTING CENTER

****

THIS JOB IS LISTED FROM TOP TO BOTTOM
THIS IS A 01 FOOT LISTING
LISTING IS DISCRIMINATED FOR VSH>50%

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
540.0	64.32	0.27	130.19	0.00	0.69	182.45	3.35
541.0	566.36	0.35	192.26	0.00	0.70	182.15	3.25
542.0	170.73	0.27	137.51	0.00	0.74	181.80	3.15
1163.0	14.37	0.20	112.34	0.00	1.00	171.27	3.11
1164.0	39.29	0.26	159.21	0.00	0.99	171.05	3.11
1165.0	27.48	0.23	125.68	0.00	0.98	170.79	3.10
1237.0	17.39	0.20	89.09	0.00	0.78	167.82	3.10
1347.0	20.11	0.21	116.87	0.00	1.00	162.50	3.07
1349.0	27.54	0.21	110.35	0.00	0.99	162.11	3.07
1437.0	16.61	0.22	115.40	0.00	0.99	154.53	2.93
1438.0	22.11	0.23	135.30	0.00	0.98	154.31	2.93
1439.0	17.12	0.22	125.96	0.00	0.99	154.08	2.93
1440.0	10.71	0.20	112.50	0.00	1.00	153.86	2.92
1443.0	11.56	0.20	97.25	0.00	0.91	153.27	2.91
1444.0	13.23	0.21	102.17	0.00	0.92	153.07	2.90
1445.0	13.45	0.20	98.24	0.00	0.94	152.86	2.88
1501.0	21.00	0.22	107.01	0.00	0.81	150.43	2.86
1543.0	10.88	0.20	107.08	0.00	0.99	147.68	2.84
1601.0	35.54	0.22	109.18	0.00	0.94	145.20	2.83
1778.0	15.24	0.20	95.05	0.00	0.88	137.21	2.79
1780.0	18.28	0.21	103.28	0.00	0.91	136.82	2.75
1781.0	28.18	0.23	124.36	0.00	0.89	136.60	2.72
1871.0	61.15	0.22	103.26	0.00	0.78	130.79	2.61
1925.0	7.86	0.17	107.08	0.00	0.99	129.13	2.57
1926.0	12.39	0.20	125.40	0.00	0.94	128.95	2.56
2137.0	71.46	0.25	121.40	0.00	0.44	124.76	2.46
2138.0	32.08	0.19	105.53	10.00	0.33	124.52	2.31
2139.0	17.86	0.18	59.37	10.00	0.23	124.34	2.18
2140.0	9.82	0.15	64.48	10.00	0.28	124.17	2.05
2141.0	5.12	0.13	72.64	10.00	0.38	124.02	1.95
2142.0	14.66	0.19	72.75	2.84	0.38	123.88	1.86
2143.0	35.26	0.22	171.54	0.00	0.74	123.68	1.75
2144.0	84.14	0.22	521.43	0.00	1.00	123.46	1.72

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2145.0	2894.11	0.22	2591.38	0.00	1.00	123.24	1.72
2146.0	2520.31	0.21	2890.79	0.00	1.00	123.02	1.72
2147.0	3271.91	0.24	2544.66	0.00	1.00	122.80	1.72
2148.0	3493.61	0.25	2467.57	0.00	1.00	122.57	1.72
2149.0	3155.12	0.23	2597.95	0.00	1.00	122.32	1.72
2150.0	1126.51	0.14	4342.31	0.00	1.00	122.11	1.72
2151.0	2239.12	0.20	3042.29	0.00	1.00	121.95	1.72
2152.0	1146.59	0.14	4177.10	0.00	1.00	121.76	1.72
2153.0	680.72	0.11	5409.20	0.00	1.00	121.63	1.72
2154.0	923.20	0.13	4655.60	0.00	1.00	121.53	1.72
2155.0	1666.28	0.21	2254.43	0.00	1.00	121.39	1.72
2156.0	3365.32	0.27	2122.38	0.00	1.00	121.16	1.72
2157.0	3006.39	0.23	2736.54	0.00	1.00	120.91	1.72
2158.0	3066.28	0.23	2734.64	0.00	1.00	120.69	1.72
2159.0	3518.35	0.25	2530.84	0.00	1.00	120.46	1.72
2160.0	4359.20	0.28	2252.65	0.00	1.00	120.20	1.72
2161.0	3971.22	0.26	2355.98	0.00	1.00	119.92	1.72
2162.0	1054.63	0.14	4437.01	0.00	1.00	119.69	1.72
2163.0	459.46	0.09	6586.05	0.00	1.00	119.57	1.72
2164.0	1259.54	0.15	4025.01	0.00	1.00	119.48	1.72
2165.0	3312.16	0.24	2510.96	0.00	1.00	119.29	1.72
2166.0	2430.41	0.21	2942.10	0.00	1.00	119.05	1.72
2167.0	3676.64	0.25	2421.39	0.00	1.00	118.84	1.72
2168.0	3377.89	0.24	2538.52	0.00	1.00	118.58	1.72
2169.0	2317.17	0.20	3053.36	0.00	1.00	118.36	1.72
2170.0	1294.83	0.15	3928.05	0.00	1.00	118.18	1.72
2171.0	1708.88	0.17	3345.74	0.00	1.00	118.02	1.72
2172.0	126.66	0.11	2367.91	0.00	1.00	117.87	1.72
2173.0	1769.60	0.18	3316.42	0.00	1.00	117.75	1.72
2174.0	562.27	0.24	1138.17	0.00	1.00	117.55	1.72
2175.0	71.64	0.21	554.23	0.00	1.00	117.32	1.72
2176.0	1984.27	0.19	3360.40	0.00	1.00	117.10	1.72
2177.0	1239.42	0.15	4050.17	0.00	1.00	116.92	1.72
2178.0	2425.61	0.21	2806.96	0.00	1.00	116.77	1.72
2179.0	3675.03	0.25	2313.23	0.00	1.00	116.56	1.72
2180.0	3904.69	0.26	2307.30	0.00	1.00	116.31	1.72
2181.0	4693.14	0.29	2152.44	0.00	1.00	116.03	1.72
2182.0	1516.30	0.16	3739.34	0.00	1.00	115.77	1.72
2183.0	1027.85	0.13	4433.69	0.00	1.00	115.62	1.72
2184.0	2414.24	0.20	2868.00	0.00	1.00	115.46	1.72
2185.0	176.66	0.24	692.46	0.00	1.00	115.26	1.72
2186.0	3064.31	0.23	2699.40	0.00	1.00	115.02	1.72
2187.0	3167.54	0.23	2598.40	0.00	1.00	114.78	1.72
2188.0	2326.33	0.20	3007.93	0.00	1.00	114.56	1.72
2189.0	3427.56	0.24	2456.03	0.00	1.00	114.36	1.72
2190.0	3279.50	0.24	2491.87	0.00	1.00	114.11	1.72
2191.0	3094.31	0.23	2562.41	0.00	1.00	113.89	1.72
2192.0	4794.33	0.29	2065.47	0.00	0.98	113.65	1.72

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2193.0	3427.79	0.30	1668.85	0.00	0.97	113.36	1.71
2194.0	3399.67	0.24	2574.27	0.00	1.00	113.08	1.71
2195.0	2939.71	0.23	2769.14	0.00	1.00	112.85	1.71
2196.0	3282.85	0.24	2587.69	0.00	1.00	112.62	1.71
2197.0	2135.92	0.19	3173.88	0.00	1.00	112.39	1.71
2198.0	684.88	0.11	5544.63	0.00	1.00	112.22	1.71
2199.0	901.00	0.13	4760.50	0.00	1.00	112.11	1.71
2200.0	833.81	0.12	4955.58	0.00	1.00	111.98	1.71
2201.0	704.28	0.11	5414.04	0.00	1.00	111.86	1.71
2202.0	1201.20	0.14	4156.44	0.00	1.00	111.74	1.71
2203.0	1611.77	0.17	3588.64	0.00	1.00	111.59	1.71
2204.0	1857.46	0.18	3392.12	0.00	1.00	111.43	1.71
2205.0	2574.49	0.21	2877.45	0.00	1.00	111.24	1.71
2206.0	2572.39	0.21	2873.46	0.00	1.00	111.04	1.71
2207.0	3236.14	0.24	2558.24	0.00	1.00	110.83	1.71
2208.0	196.91	0.28	420.77	0.00	1.00	110.59	1.71
2209.0	4522.75	0.28	2231.28	0.00	1.00	110.30	1.71
2210.0	3409.46	0.24	2579.87	0.00	1.00	110.03	1.71
2211.0	45.99	0.20	428.84	0.00	1.00	109.79	1.71
2212.0	9.15	0.14	496.32	0.00	1.00	109.61	1.71
2213.0	1726.46	0.17	3441.30	0.00	1.00	109.47	1.71
2214.0	1432.62	0.16	3733.20	0.00	1.00	109.29	1.71
2215.0	932.13	0.13	4601.89	0.00	1.00	109.14	1.71
2216.0	497.36	0.09	6284.61	0.00	1.00	109.02	1.71
2217.0	981.46	0.13	4499.12	0.00	1.00	108.92	1.71
2218.0	1123.19	0.14	4256.67	0.00	1.00	108.79	1.71
2219.0	1801.81	0.18	3455.37	0.00	1.00	108.65	1.71
2220.0	3322.44	0.24	2644.96	0.00	1.00	108.46	1.71
2221.0	133.31	0.24	650.75	0.00	1.00	108.21	1.71
2222.0	100.76	0.24	452.72	0.00	1.00	107.97	1.71
2223.0	92.29	0.24	383.21	0.00	1.00	107.73	1.71
2224.0	78.23	0.22	496.56	0.00	1.00	107.49	1.71
2225.0	2735.39	0.22	2677.47	0.00	1.00	107.27	1.71
2226.0	188.63	0.18	1183.36	0.00	1.00	107.05	1.71
2227.0	1605.94	0.17	3572.88	0.00	1.00	106.87	1.71
2228.0	991.36	0.13	4644.93	0.00	1.00	106.71	1.71
2229.0	1103.42	0.14	4577.18	0.00	1.00	106.56	1.71
2230.0	1260.11	0.15	4480.17	0.00	1.00	106.44	1.71
2231.0	3035.25	0.23	2933.77	0.00	1.00	106.27	1.71
2232.0	1071.35	0.34	883.08	0.00	0.95	106.01	1.71
2233.0	289.81	0.31	407.92	0.00	1.00	105.67	1.69
2234.0	563.74	0.36	389.30	0.00	0.84	105.35	1.68
2235.0	718.10	0.38	303.57	0.00	0.71	104.98	1.60
2236.0	7321.81	0.36	1766.18	0.00	0.79	104.60	1.49
2237.0	5027.20	0.30	2125.59	0.00	0.99	104.26	1.44
2238.0	462.90	0.23	1113.13	0.00	1.00	103.97	1.44
2239.0	76.12	0.22	538.23	0.00	1.00	103.74	1.44
2240.0	2396.57	0.20	2939.87	0.00	1.00	103.52	1.44

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE INTEGRATIONS POR-FT	HY-FT
2241.0	717.62	0.11	5238.22	0.00	1.00	103.33	1.44
2242.0	773.62	0.12	5054.21	0.00	1.00	103.21	1.44
2243.0	919.33	0.13	4617.75	0.00	1.00	103.09	1.44
2244.0	829.80	0.12	4890.94	0.00	1.00	102.96	1.44
2245.0	352.93	0.08	7667.02	0.00	1.00	102.85	1.44
2246.0	39.97	0.10	1759.91	0.00	1.00	102.77	1.44
2247.0	30.53	0.15	799.36	0.00	1.00	102.65	1.44
2248.0	2673.24	0.22	2959.19	0.00	1.00	102.48	1.44
2249.0	198.55	0.23	830.67	0.00	1.00	102.26	1.44
2250.0	223.77	0.29	420.00	0.00	1.00	102.02	1.44
2251.0	145.43	0.26	473.33	0.00	1.00	101.73	1.44
2252.0	75.83	0.23	397.02	0.00	1.00	101.49	1.44
2253.0	178.92	0.27	428.13	0.00	1.00	101.25	1.44
2254.0	1965.92	0.36	887.10	0.00	0.72	100.96	1.43
2255.0	5343.19	0.30	1901.72	0.00	0.90	100.61	1.33
2256.0	1394.17	0.16	3756.74	0.00	1.00	100.34	1.32
2257.0	66.11	0.09	2596.80	0.00	1.00	100.21	1.32
2258.0	29.60	0.12	1197.56	0.00	1.00	100.11	1.32
2259.0	12.82	0.11	972.23	0.00	1.00	99.99	1.32
2260.0	14.81	0.07	2122.29	0.00	1.00	99.90	1.32
2261.0	8.04	0.07	1936.47	0.00	1.00	99.82	1.32
2262.0	8.37	0.08	1359.26	0.00	1.00	99.75	1.32
2263.0	5.62	0.10	843.66	0.00	1.00	99.65	1.32
2264.0	12.28	0.07	2101.12	0.00	1.00	99.55	1.32
2265.0	19.63	0.05	4753.29	0.00	1.00	99.49	1.32
2266.0	266.90	0.07	8502.60	0.00	1.00	99.43	1.32
2267.0	519.47	0.10	6006.92	0.00	1.00	99.35	1.32
2268.0	91.17	0.09	3314.54	0.00	1.00	99.27	1.32
2269.0	13.28	0.09	1436.16	0.00	1.00	99.18	1.32
2270.0	10.59	0.13	709.91	0.00	1.00	99.09	1.32
2271.0	3.75	0.09	891.51	0.00	1.00	98.96	1.32
2272.0	6.37	0.08	1392.61	0.00	1.00	98.87	1.32
2273.0	741.94	0.11	5454.00	0.00	1.00	98.79	1.32
2274.0	1601.72	0.17	3781.96	0.00	1.00	98.66	1.32
2275.0	51.04	0.16	967.66	0.00	1.00	98.49	1.32
2276.0	46.60	0.14	1179.02	0.00	1.00	98.33	1.32
2277.0	4025.96	0.26	2553.09	0.00	1.00	98.18	1.32
2278.0	349.63	0.32	383.84	0.00	0.97	97.89	1.32
2279.0	148.34	0.27	353.67	0.00	1.00	97.59	1.31
2280.0	194.75	0.28	484.32	0.00	1.00	97.30	1.31
2281.0	140.16	0.24	760.67	0.00	1.00	97.04	1.31
2282.0	333.11	0.32	412.18	0.00	1.00	96.79	1.31
2283.0	370.76	0.33	359.44	0.00	0.97	96.47	1.31
2284.0	348.39	0.34	320.46	0.00	0.94	96.13	1.30
2285.0	426.41	0.34	403.58	0.00	0.96	95.80	1.29
2286.0	630.98	0.37	388.85	0.00	0.84	95.45	1.26
2287.0	8910.15	0.39	1717.46	0.00	0.76	95.07	1.18
2288.0	456.83	0.33	428.27	0.00	0.93	94.69	1.10

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2289.0	262.27	0.29	470.13	0.00	1.00	94.37	1.09
2290.0	3757.62	0.26	2514.35	0.00	1.00	94.09	1.09
2291.0	161.48	0.23	744.94	0.00	1.00	93.84	1.09
2292.0	94.89	0.22	652.42	0.00	1.00	93.61	1.09
2293.0	524.98	0.22	1307.95	0.00	1.00	93.38	1.09
2294.0	1490.56	0.16	3788.96	0.00	1.00	93.17	1.09
2295.0	2245.52	0.20	3145.17	0.00	1.00	93.01	1.09
2296.0	2664.10	0.22	2922.90	0.00	1.00	92.80	1.09
2297.0	1979.47	0.19	3367.56	0.00	1.00	92.60	1.09
2298.0	1572.10	0.17	3623.13	0.00	1.00	92.43	1.09
2299.0	36.01	0.16	720.16	0.00	1.00	92.27	1.09
2300.0	1956.09	0.18	3193.62	0.00	1.00	92.10	1.09
2301.0	1972.32	0.19	3197.80	0.00	1.00	91.91	1.09
2302.0	1470.07	0.16	3787.77	0.00	1.00	91.73	1.09
2303.0	7.02	0.12	746.12	0.00	1.00	91.58	1.09
2304.0	8.44	0.06	2201.35	0.00	1.00	91.47	1.09
2305.0	5.08	0.07	1486.56	0.00	1.00	91.41	1.09
2306.0	7.89	0.08	1576.64	0.00	1.00	91.34	1.09
2307.0	681.37	0.11	5557.47	0.00	1.00	91.26	1.09
2308.0	591.14	0.10	6004.63	0.00	1.00	91.16	1.09
2309.0	341.59	0.08	8102.55	0.00	1.00	91.07	1.09
2310.0	2.42	0.04	2495.90	0.00	1.00	91.00	1.09
2311.0	1.87	0.06	1556.72	0.00	1.00	90.95	1.09
2312.0	12.88	0.11	1204.25	0.00	1.00	90.88	1.09
2313.0	2567.80	0.21	3224.04	0.00	1.00	90.75	1.09
2314.0	452.48	0.32	678.40	0.00	0.99	90.51	1.09
2315.0	359.21	0.34	311.50	0.00	0.90	90.18	1.08
2316.0	177.43	0.28	358.33	0.00	1.00	89.85	1.05
2317.0	134.16	0.27	309.96	0.00	1.00	89.57	1.05
2318.0	131.01	0.28	293.89	0.00	1.00	89.29	1.05
2319.0	52.35	0.22	374.75	0.00	1.00	89.04	1.05
2320.0	39.53	0.20	382.29	0.00	1.00	88.83	1.05
2321.0	73.78	0.24	335.87	0.00	1.00	88.62	1.05
2322.0	165.03	0.30	274.37	0.00	0.97	88.37	1.05
2323.0	336.94	0.34	272.46	0.00	0.79	88.06	1.03
2324.0	86.93	0.25	308.01	0.00	1.00	87.73	0.98
2325.0	37.36	0.20	444.51	0.00	1.00	87.50	0.98
2326.0	129.04	0.25	540.80	0.00	1.00	87.30	0.98
2327.0	319.31	0.31	420.73	0.00	1.00	87.03	0.98
2328.0	464.84	0.34	404.44	0.00	0.95	86.71	0.97
2329.0	6955.77	0.35	1959.55	0.00	0.94	86.37	0.96
2330.0	817.78	0.34	777.58	0.00	0.95	86.01	0.93
2331.0	366.31	0.34	305.23	0.00	0.90	85.67	0.91
2332.0	310.24	0.36	238.75	0.00	0.79	85.32	0.86
2333.0	274.28	0.34	273.83	0.00	0.91	84.97	0.80
2334.0	263.05	0.31	365.08	0.00	1.00	84.65	0.79
2335.0	206.63	0.28	438.63	0.00	1.00	84.35	0.79
2336.0	108.47	0.20	909.43	0.00	1.00	84.09	0.79

DEPTH	PERM. INDEX	EFFECTIVE POROSITY	SHALE VOL.	GAS INDEX	SW	CUMULATIVE INTEGRATIONS	
						POR-FT	HY-FT
FEET		%	%		%		
2337.0	1657.38	0.17	3932.06	0.00	1.00	83.91	0.79
2338.0	1739.26	0.17	3800.44	0.00	1.00	83.75	0.79
2339.0	233.79	0.21	1120.91	0.00	1.00	83.57	0.79
2340.0	80.97	0.22	519.98	0.00	1.00	83.36	0.79
2341.0	51.38	0.20	605.68	0.00	1.00	83.14	0.79
2342.0	57.79	0.21	471.69	0.00	1.00	82.94	0.79
2343.0	263.02	0.21	1178.51	0.00	1.00	82.72	0.79
2344.0	2514.96	0.21	3139.97	0.00	1.00	82.52	0.79
2345.0	240.37	0.23	907.18	0.00	1.00	82.30	0.79
2346.0	2221.36	0.20	3286.45	0.00	1.00	82.07	0.79
2347.0	1320.21	0.15	4398.94	0.00	1.00	81.88	0.79
2348.0	21.29	0.16	718.80	0.00	1.00	81.73	0.79
2349.0	64.65	0.22	502.44	0.00	1.00	81.56	0.79
2350.0	404.40	0.31	616.32	0.00	1.00	81.31	0.79
2351.0	5229.52	0.30	2280.75	0.00	1.00	80.99	0.78
2352.0	386.77	0.31	551.76	0.00	1.00	80.69	0.78
2353.0	489.11	0.35	377.31	0.00	0.88	80.37	0.78
2354.0	415.97	0.34	362.72	0.00	0.91	80.03	0.74
2355.0	264.14	0.29	535.20	0.00	1.00	79.70	0.72
2356.0	95.21	0.23	501.95	0.00	1.00	79.43	0.72
2357.0	269.03	0.31	362.11	0.00	0.99	79.17	0.72
2358.0	313.43	0.30	465.96	0.00	0.99	78.86	0.71
2359.0	3704.07	0.25	2458.84	0.00	1.00	78.57	0.71
2360.0	2458.06	0.21	2916.20	0.00	1.00	78.33	0.71
2361.0	616.09	0.15	2697.10	0.00	1.00	78.14	0.71
2362.0	962.12	0.13	4576.54	0.00	1.00	77.99	0.71
2363.0	48.16	0.12	1446.14	0.00	1.00	77.86	0.71
2364.0	8.91	0.07	1836.34	0.00	1.00	77.75	0.71
2365.0	196.49	0.06	10028.52	0.00	1.00	77.68	0.71
2366.0	175.00	0.06	10711.38	0.00	1.00	77.62	0.71
2367.0	341.73	0.08	7657.27	0.00	1.00	77.56	0.71
2368.0	1150.92	0.14	4150.79	0.00	1.00	77.48	0.71
2369.0	1857.23	0.18	3298.79	0.00	1.00	77.32	0.71
2370.0	14.63	0.09	1576.41	0.00	1.00	77.17	0.71
2371.0	9.75	0.07	1960.48	0.00	1.00	77.09	0.71
2372.0	44.19	0.11	1701.29	0.00	1.00	77.01	0.71
2373.0	10.92	0.12	859.72	0.00	1.00	76.90	0.71
2374.0	4768.53	0.29	2069.73	0.00	0.98	76.73	0.71
2375.0	1465.97	0.23	1846.24	0.00	1.00	76.43	0.69
2376.0	980.87	0.13	4555.66	0.00	1.00	76.24	0.69
2377.0	7.17	0.09	1199.62	0.00	1.00	76.12	0.69
2378.0	2.61	0.06	1497.42	0.00	1.00	76.04	0.69
2379.0	3.99	0.03	3715.01	0.00	1.00	75.98	0.69
2380.0	285.03	0.07	8474.91	0.00	1.00	75.94	0.69
2381.0	580.15	0.10	6075.99	0.00	1.00	75.86	0.69
2382.0	14.27	0.15	614.66	0.00	1.00	75.74	0.69
2383.0	35.00	0.18	574.60	0.00	1.00	75.57	0.69
2384.0	41.84	0.19	531.13	0.00	1.00	75.38	0.69

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2385.0	40.23	0.20	404.89	0.00	1.00	75.20	0.69
2386.0	104.80	0.25	343.58	0.00	1.00	74.99	0.69
2387.0	16.42	0.16	563.99	0.00	1.00	74.76	0.69
2388.0	36.05	0.19	485.29	0.00	1.00	74.60	0.69
2389.0	111.27	0.25	390.52	0.00	1.00	74.39	0.69
2390.0	108.13	0.24	528.03	0.00	1.00	74.14	0.69
2391.0	4.64	0.11	795.09	0.00	1.00	73.93	0.69
2392.0	0.28	0.04	1572.18	0.00	1.00	73.85	0.69
2393.0	3.70	0.11	734.26	0.00	1.00	73.79	0.69
2394.0	52.87	0.21	422.69	0.00	1.00	73.66	0.69
2395.0	115.64	0.25	436.29	0.00	1.00	73.42	0.69
2396.0	65.96	0.21	575.25	0.00	1.00	73.18	0.69
2397.0	102.99	0.23	509.70	0.00	1.00	72.95	0.69
2398.0	45.43	0.20	406.49	0.00	1.00	72.72	0.69
2399.0	6.59	0.10	996.88	0.00	1.00	72.53	0.69
2400.0	11.72	0.06	2772.09	0.00	1.00	72.46	0.69
2401.0	48.27	0.12	1458.25	0.00	1.00	72.39	0.69
2402.0	23.86	0.16	703.20	0.00	1.00	72.26	0.69
2403.0	33.58	0.18	606.19	0.00	1.00	72.09	0.69
2404.0	27.61	0.16	777.31	0.00	1.00	71.91	0.69
2405.0	36.67	0.19	498.61	0.00	1.00	71.74	0.69
2406.0	37.25	0.19	548.16	0.00	1.00	71.55	0.69
2407.0	59.48	0.19	790.63	0.00	1.00	71.37	0.69
2408.0	117.51	0.24	643.11	0.00	1.00	71.18	0.69
2409.0	255.92	0.24	901.45	0.00	1.00	70.95	0.69
2410.0	134.53	0.24	718.82	0.00	1.00	70.71	0.69
2411.0	100.47	0.24	454.03	0.00	1.00	70.46	0.69
2412.0	117.14	0.26	372.71	0.00	1.00	70.22	0.69
2413.0	139.71	0.27	369.14	0.00	1.00	69.95	0.69
2414.0	98.05	0.24	467.74	0.00	1.00	69.70	0.69
2415.0	93.00	0.23	570.12	0.00	1.00	69.46	0.69
2416.0	61.91	0.21	538.59	0.00	1.00	69.24	0.69
2417.0	112.62	0.24	533.26	0.00	1.00	69.03	0.69
2418.0	50.66	0.16	978.56	0.00	1.00	68.81	0.69
2419.0	23.37	0.14	934.08	0.00	1.00	68.67	0.69
2420.0	2287.60	0.20	3212.32	0.00	1.00	68.51	0.69
2421.0	4373.52	0.28	2325.00	0.00	1.00	68.29	0.69
2422.0	96.86	0.23	540.37	0.00	1.00	68.02	0.69
2423.0	131.86	0.23	677.96	0.00	1.00	67.80	0.69
2424.0	3700.83	0.25	2410.51	0.00	1.00	67.56	0.69
2425.0	2924.83	0.23	2724.44	0.00	1.00	67.32	0.69
2426.0	1356.89	0.15	3972.71	0.00	1.00	67.12	0.69
2427.0	969.43	0.13	4754.09	0.00	1.00	66.97	0.69
2428.0	5.98	0.09	1129.76	0.00	1.00	66.85	0.69
2429.0	13.81	0.08	1793.22	0.00	1.00	66.77	0.69
2430.0	1925.04	0.18	3503.93	0.00	1.00	66.66	0.69
2431.0	97.35	0.23	555.49	0.00	1.00	66.45	0.69
2432.0	36.44	0.17	708.46	0.00	1.00	66.23	0.69

DEPTH	PERM. INDEX	EFFECTIVE POROSITY	SHALE VOL.	GAS INDEX	Sw CH	CUMULATIVE INTEGRATIONS POR-FT	HY-FT
FEET		%	%		%		
2433.0	166.32	0.15	1721.43	0.00	1.00	66.07	0.69
2434.0	370.25	0.17	1844.83	0.00	1.00	65.92	0.69
2435.0	16.10	0.14	767.71	0.00	1.00	65.76	0.69
2436.0	4.73	0.08	1293.07	0.00	1.00	65.64	0.69
2437.0	7.25	0.08	1420.36	0.00	1.00	65.57	0.69
2438.0	2.42	0.07	1454.79	0.00	1.00	65.48	0.69
2439.0	7.00	0.11	920.18	0.00	1.00	65.42	0.69
2440.0	131.91	0.26	418.59	0.00	1.00	65.27	0.69
2441.0	299.21	0.33	293.02	0.00	0.92	64.98	0.68
2442.0	304.38	0.32	331.34	0.00	0.95	64.65	0.65
2443.0	375.58	0.33	346.05	0.00	0.90	64.32	0.63
2444.0	449.56	0.36	270.76	0.00	0.73	63.98	0.57
2445.0	371.49	0.33	331.50	0.00	0.81	63.62	0.47
2446.0	4066.96	0.27	2245.23	0.00	1.00	63.30	0.43
2447.0	3539.24	0.25	2367.14	0.00	1.00	63.03	0.43
2448.0	2264.51	0.20	2995.32	0.00	1.00	62.79	0.43
2449.0	1869.37	0.18	3245.74	0.00	1.00	62.60	0.43
2450.0	2871.16	0.22	2589.31	0.00	1.00	62.41	0.43
2451.0	2123.17	0.19	3048.01	0.00	1.00	62.20	0.43
2452.0	221.04	0.19	1169.04	0.00	1.00	62.01	0.43
2453.0	41.84	0.17	713.49	0.00	1.00	61.83	0.43
2454.0	30.36	0.18	613.89	0.00	1.00	61.65	0.43
2455.0	3.57	0.12	390.77	0.00	1.00	61.49	0.43
2458.0	10.89	0.14	512.29	0.00	1.00	61.27	0.43
2459.0	14.92	0.10	1303.85	0.00	1.00	61.14	0.43
2460.0	303.43	0.19	1313.36	0.00	1.00	61.02	0.43
2461.0	2044.37	0.19	3190.46	0.00	1.00	60.81	0.43
2462.0	34.59	0.11	1399.86	0.00	1.00	60.65	0.43
2463.0	162.39	0.14	1852.42	0.00	1.00	60.54	0.43
2464.0	1200.89	0.14	4050.40	0.00	1.00	60.39	0.43
2465.0	462.25	0.14	2779.93	0.00	1.00	60.26	0.43
2466.0	54.84	0.14	1141.11	0.00	1.00	60.11	0.43
2467.0	36.32	0.13	1201.36	0.00	1.00	59.98	0.43
2468.0	2213.04	0.20	3046.19	0.00	1.00	59.84	0.43
2469.0	1873.18	0.18	3287.03	0.00	1.00	59.64	0.43
2470.0	1401.99	0.17	3157.02	0.00	1.00	59.46	0.43
2471.0	1153.41	0.14	4122.92	0.00	1.00	59.30	0.43
2472.0	48.25	0.13	1278.55	0.00	1.00	59.16	0.43
2473.0	11.94	0.11	989.88	0.00	1.00	59.03	0.43
2474.0	15.88	0.10	1297.20	0.00	1.00	58.93	0.43
2475.0	15.39	0.09	1492.48	0.00	1.00	58.82	0.43
2476.0	3.92	0.06	1934.08	0.00	1.00	58.73	0.43
2477.0	3.34	0.07	1368.75	0.00	1.00	58.67	0.43
2478.0	4.53	0.10	925.42	0.00	1.00	58.60	0.43
2479.0	58.16	0.21	430.61	0.00	1.00	58.48	0.43
2480.0	84.49	0.23	420.58	0.00	1.00	58.26	0.43
2481.0	65.13	0.19	737.84	0.00	1.00	58.04	0.43

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2482.0	1890.34	0.18	3397.81	0.00	1.00	57.86	0.43
2483.0	17.41	0.16	660.76	0.00	1.00	57.68	0.43
2484.0	7.68	0.13	664.03	0.00	1.00	57.53	0.43
2485.0	17.86	0.16	629.51	0.00	1.00	57.40	0.43
2486.0	85.70	0.23	460.14	0.00	1.00	57.22	0.43
2487.0	54.28	0.22	387.79	0.00	1.00	56.99	0.43
2488.0	138.67	0.29	262.50	0.00	0.99	56.77	0.43
2489.0	138.73	0.30	236.75	0.00	0.94	56.47	0.42
2490.0	90.17	0.26	289.16	0.00	1.00	56.19	0.42
2491.0	108.47	0.26	344.31	0.00	1.00	55.93	0.42
2492.0	81.48	0.24	341.05	0.00	1.00	55.67	0.42
2493.0	49.01	0.21	374.55	0.00	1.00	55.43	0.42
2494.0	90.62	0.26	291.10	0.00	1.00	55.21	0.42
2495.0	184.52	0.30	300.35	0.00	0.98	54.93	0.41
2496.0	69.25	0.22	411.57	0.00	1.00	54.65	0.40
2497.0	86.99	0.23	485.39	0.00	1.00	54.42	0.40
2498.0	85.39	0.24	413.98	0.00	1.00	54.18	0.40
2499.0	164.13	0.30	286.43	0.00	0.99	53.94	0.40
2500.0	226.54	0.34	232.17	0.00	0.82	53.63	0.39
2501.0	198.34	0.32	261.47	0.00	0.94	53.30	0.34
2502.0	244.66	0.30	411.86	0.00	1.00	53.00	0.33
2503.0	209.47	0.29	396.63	0.00	1.00	52.71	0.33
2504.0	111.55	0.27	295.04	0.00	1.00	52.43	0.33
2505.0	105.34	0.27	298.50	0.00	1.00	52.16	0.33
2506.0	129.98	0.28	303.89	0.00	1.00	51.89	0.33
2507.0	133.25	0.28	317.90	0.00	1.00	51.61	0.33
2508.0	274.69	0.32	323.11	0.00	0.97	51.32	0.33
2509.0	167.56	0.30	277.86	0.00	0.98	51.00	0.32
2510.0	90.44	0.27	238.38	0.00	0.99	50.73	0.32
2511.0	97.41	0.27	255.20	0.00	0.99	50.45	0.31
2512.0	11.01	0.14	518.48	0.00	1.00	50.21	0.31
2513.0	36.97	0.19	500.87	0.00	1.00	50.07	0.31
2514.0	84.22	0.21	702.59	0.00	1.00	49.87	0.31
2515.0	32.21	0.17	670.51	0.00	1.00	49.68	0.31
2516.0	2457.74	0.21	3022.06	0.00	1.00	49.50	0.31
2517.0	1556.37	0.16	3875.88	0.00	1.00	49.31	0.31
2518.0	54.66	0.21	447.78	0.00	1.00	49.14	0.31
2519.0	89.58	0.24	378.99	0.00	1.00	48.92	0.31
2520.0	58.64	0.21	479.15	0.00	1.00	48.70	0.31
2521.0	63.48	0.21	542.21	0.00	1.00	48.49	0.31
2522.0	42.69	0.19	511.02	0.00	1.00	48.29	0.31
2523.0	41.66	0.20	458.41	0.00	1.00	48.10	0.31
2524.0	53.36	0.22	376.90	0.00	1.00	47.91	0.31
2525.0	168.42	0.30	275.65	0.00	0.98	47.66	0.31
2526.0	131.33	0.28	302.72	0.00	1.00	47.36	0.31
2527.0	102.83	0.27	283.63	0.00	1.00	47.08	0.31
2528.0	127.60	0.28	279.65	0.00	1.00	46.81	0.31
2529.0	123.83	0.27	326.10	0.00	1.00	46.52	0.31

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2530.0	48.06	0.21	383.28	0.00	1.00	46.28	0.31
2531.0	81.78	0.23	419.71	0.00	1.00	46.06	0.31
2532.0	78.42	0.22	507.26	0.00	1.00	45.83	0.31
2533.0	64.56	0.22	423.71	0.00	1.00	45.62	0.31
2534.0	170.66	0.28	365.98	0.00	1.00	45.40	0.31
2535.0	212.22	0.28	509.17	0.00	1.00	45.12	0.31
2536.0	190.46	0.28	384.84	0.00	1.00	44.85	0.31
2537.0	171.55	0.28	326.90	0.00	1.00	44.57	0.31
2538.0	232.89	0.28	483.84	0.00	1.00	44.27	0.30
2539.0	144.09	0.25	529.05	0.00	1.00	44.00	0.30
2540.0	121.07	0.26	354.10	0.00	1.00	43.74	0.30
2541.0	81.65	0.23	399.53	0.00	1.00	43.49	0.30
2542.0	15.14	0.15	524.88	0.00	1.00	43.28	0.30
2543.0	30.66	0.18	462.70	0.00	1.00	43.12	0.30
2544.0	162.15	0.27	380.87	0.00	1.00	42.91	0.30
2545.0	222.72	0.28	554.52	0.00	1.00	42.63	0.30
2546.0	205.73	0.27	474.97	0.00	1.00	42.36	0.30
2547.0	176.11	0.27	464.53	0.00	1.00	42.08	0.30
2548.0	53.17	0.20	513.53	0.00	1.00	41.83	0.30
2549.0	108.85	0.24	444.55	0.00	1.00	41.63	0.30
2550.0	243.99	0.29	443.39	0.00	0.98	41.37	0.30
2551.0	61.34	0.19	735.86	0.00	1.00	41.11	0.29
2552.0	15.37	0.09	1725.96	0.00	1.00	40.95	0.29
2553.0	25.82	0.10	1650.47	0.00	1.00	40.87	0.29
2554.0	69.85	0.22	524.69	0.00	1.00	40.74	0.29
2555.0	192.41	0.29	331.10	0.00	0.99	40.50	0.29
2556.0	125.51	0.27	285.03	0.00	0.99	40.20	0.28
2557.0	52.32	0.23	265.02	0.00	1.00	39.93	0.28
2558.0	9.11	0.14	437.65	0.00	1.00	39.72	0.28
2559.0	3.95	0.11	564.09	0.00	1.00	39.59	0.28
2560.0	2.97	0.11	551.59	0.00	1.00	39.48	0.28
2561.0	6.84	0.13	386.45	0.00	1.00	39.37	0.28
2562.0	8.07	0.14	429.28	0.00	1.00	39.23	0.28
2563.0	8.99	0.14	504.76	0.00	1.00	39.10	0.28
2564.0	29.22	0.18	443.13	0.00	1.00	38.95	0.28
2565.0	9.60	0.14	597.72	0.00	1.00	38.77	0.28
2566.0	8.05	0.13	597.18	0.00	1.00	38.65	0.28
2567.0	52.73	0.21	421.70	0.00	1.00	38.51	0.28
2568.0	128.76	0.27	286.78	0.00	0.99	38.29	0.28
2569.0	122.14	0.26	337.35	0.00	1.00	38.02	0.28
2570.0	120.13	0.27	279.12	0.00	0.99	37.76	0.28
2571.0	30.64	0.19	364.68	0.00	1.00	37.51	0.28
2572.0	10.87	0.14	634.40	0.00	1.00	37.33	0.28
2573.0	29.13	0.18	457.89	0.00	1.00	37.18	0.28
2574.0	50.03	0.21	401.01	0.00	1.00	36.99	0.28
2575.0	65.36	0.22	438.91	0.00	1.00	36.78	0.28
2576.0	60.34	0.22	352.68	0.00	1.00	36.57	0.28
2577.0	68.39	0.22	400.71	0.00	1.00	36.35	0.28

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2578.0	116.64	0.24	459.80	0.00	1.00	36.12	0.28
2579.0	66.49	0.23	367.22	0.00	1.00	35.88	0.28
2580.0	96.38	0.26	299.68	0.00	1.00	35.64	0.28
2581.0	74.22	0.23	348.27	0.00	1.00	35.38	0.28
2582.0	44.53	0.21	379.21	0.00	1.00	35.16	0.28
2583.0	53.76	0.22	329.39	0.00	1.00	34.95	0.28
2584.0	66.12	0.23	348.02	0.00	1.00	34.72	0.28
2585.0	45.10	0.19	566.99	0.00	1.00	34.49	0.28
2586.0	27.73	0.15	777.63	0.00	1.00	34.31	0.28
2587.0	12.88	0.15	603.34	0.00	1.00	34.16	0.28
2588.0	27.51	0.18	465.19	0.00	1.00	34.01	0.28
2589.0	30.59	0.18	516.50	0.00	1.00	33.83	0.28
2590.0	37.69	0.19	517.84	0.00	1.00	33.64	0.28
2591.0	31.54	0.18	520.42	0.00	1.00	33.45	0.28
2592.0	44.63	0.20	376.39	0.00	1.00	33.26	0.28
2593.0	103.56	0.25	364.40	0.00	1.00	33.04	0.28
2594.0	36.18	0.19	505.67	0.00	1.00	32.81	0.28
2595.0	37.46	0.20	383.11	0.00	1.00	32.63	0.28
2596.0	28.28	0.19	366.28	0.00	1.00	32.44	0.28
2597.0	33.08	0.19	433.97	0.00	1.00	32.26	0.28
2598.0	40.76	0.16	835.62	0.00	1.00	32.07	0.28
2599.0	8.24	0.11	824.48	0.00	1.00	31.93	0.28
2600.0	30.58	0.18	464.75	0.00	1.00	31.80	0.28
2601.0	41.55	0.20	440.69	0.00	1.00	31.61	0.28
2602.0	37.11	0.20	391.39	0.00	1.00	31.41	0.28
2603.0	50.68	0.22	330.91	0.00	1.00	31.21	0.28
2604.0	41.02	0.21	343.01	0.00	1.00	30.99	0.28
2605.0	24.98	0.19	339.89	0.00	1.00	30.79	0.28
2606.0	17.07	0.17	365.96	0.00	1.00	30.61	0.28
2607.0	12.41	0.15	408.04	0.00	1.00	30.44	0.28
2608.0	15.47	0.17	348.07	0.00	1.00	30.28	0.28
2609.0	3.72	0.11	451.51	0.00	1.00	30.13	0.28
2610.0	8.86	0.16	235.50	0.00	1.00	30.01	0.28
2611.0	3.54	0.13	155.33	0.00	1.00	29.86	0.28
2623.0	1.91	0.10	263.15	0.00	1.00	29.26	0.28
2624.0	6.53	0.13	412.04	0.00	1.00	29.15	0.28
2625.0	26.61	0.17	493.89	0.00	1.00	29.00	0.28
2626.0	29.16	0.17	540.81	0.00	1.00	28.81	0.28
2627.0	8.12	0.07	1637.71	0.00	1.00	28.67	0.28
2628.0	22.26	0.11	1170.26	0.00	1.00	28.59	0.28
2629.0	35.64	0.19	371.29	0.00	1.00	28.46	0.28
2630.0	24.11	0.19	300.07	0.00	1.00	28.26	0.28
2631.0	17.29	0.17	313.30	0.00	1.00	28.08	0.28
2632.0	19.33	0.17	348.70	0.00	1.00	27.90	0.28
2633.0	35.85	0.19	369.90	0.00	1.00	27.72	0.28
2634.0	24.81	0.17	440.01	0.00	1.00	27.53	0.28
2635.0	28.69	0.18	478.35	0.00	1.00	27.36	0.28

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2636.0	31.23	0.18	576.95	0.00	1.00	27.17	0.28
2637.0	23.85	0.17	490.29	0.00	1.00	27.00	0.28
2638.0	17.04	0.16	522.05	0.00	1.00	26.83	0.28
2639.0	27.52	0.16	688.08	0.00	1.00	26.67	0.28
2640.0	11.52	0.12	776.34	0.00	1.00	26.52	0.28
2641.0	8.21	0.11	885.69	0.00	1.00	26.41	0.28
2642.0	14.37	0.14	699.14	0.00	1.00	26.29	0.28
2643.0	693.94	0.12	4444.60	0.00	1.00	26.16	0.28
2644.0	531.95	0.10	5973.95	0.00	1.00	26.05	0.28
2645.0	22.67	0.10	1532.81	0.00	1.00	25.96	0.28
2646.0	2.71	0.07	1168.25	0.00	1.00	25.87	0.28
2647.0	0.86	0.05	1464.34	0.00	1.00	25.81	0.28
2648.0	4.35	0.11	648.81	0.00	1.00	25.75	0.28
2649.0	21.40	0.17	418.09	0.00	1.00	25.62	0.28
2650.0	22.02	0.17	450.19	0.00	1.00	25.45	0.28
2651.0	14.09	0.15	498.10	0.00	1.00	25.28	0.28
2652.0	4.19	0.12	561.60	0.00	1.00	25.14	0.28
2653.0	10.49	0.14	521.54	0.00	1.00	25.01	0.28
2654.0	25.85	0.17	463.41	0.00	1.00	24.85	0.28
2655.0	31.13	0.18	537.12	0.00	1.00	24.67	0.28
2656.0	75.17	0.22	516.34	0.00	1.00	24.48	0.28
2657.0	81.11	0.22	534.52	0.00	1.00	24.25	0.28
2658.0	45.43	0.16	786.97	0.00	1.00	24.03	0.28
2659.0	9.51	0.08	1505.67	0.00	1.00	23.89	0.28
2660.0	678.88	0.11	5197.00	0.00	1.00	23.81	0.28
2661.0	1010.47	0.13	4251.79	0.00	1.00	23.69	0.28
2662.0	1904.39	0.18	3170.90	0.00	1.00	23.55	0.28
2663.0	2447.67	0.21	2813.47	0.00	1.00	23.35	0.28
2664.0	1596.62	0.17	3437.01	0.00	1.00	23.17	0.28
2665.0	2565.67	0.21	2716.07	0.00	1.00	22.99	0.28
2666.0	1972.11	0.19	3078.20	0.00	1.00	22.79	0.28
2667.0	237.85	0.13	2187.30	0.00	1.00	22.61	0.28
2668.0	8.52	0.10	992.00	0.00	1.00	22.49	0.28
2669.0	17.51	0.15	646.51	0.00	1.00	22.38	0.28
2670.0	10.09	0.13	688.69	0.00	1.00	22.23	0.28
2671.0	14.68	0.13	815.24	0.00	1.00	22.11	0.28
2672.0	18.38	0.13	817.64	0.00	1.00	21.98	0.28
2673.0	6.94	0.13	577.14	0.00	1.00	21.85	0.28
2674.0	13.87	0.15	438.32	0.00	1.00	21.72	0.28
2675.0	22.87	0.18	323.87	0.00	1.00	21.56	0.28
2676.0	23.63	0.18	381.09	0.00	1.00	21.38	0.28
2677.0	32.36	0.19	388.50	0.00	1.00	21.19	0.28
2678.0	6.61	0.13	434.00	0.00	1.00	21.02	0.28
2679.0	4.52	0.12	518.52	0.00	1.00	20.89	0.28
2680.0	7.27	0.13	482.29	0.00	1.00	20.77	0.28
2681.0	8.89	0.14	458.90	0.00	1.00	20.64	0.28
2682.0	19.01	0.16	441.75	0.00	1.00	20.50	0.28
2683.0	12.14	0.15	421.47	0.00	1.00	20.33	0.28

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2684.0	15.05	0.16	403.94	0.00	1.00	20.18	0.28
2685.0	8.51	0.14	460.63	0.00	1.00	20.02	0.28
2686.0	8.81	0.14	437.96	0.00	1.00	19.89	0.28
2687.0	14.81	0.16	442.59	0.00	1.00	19.75	0.28
2688.0	13.79	0.15	566.22	0.00	1.00	19.59	0.28
2689.0	26.32	0.17	547.60	0.00	1.00	19.45	0.28
2690.0	14.91	0.15	498.25	0.00	1.00	19.27	0.28
2691.0	17.33	0.16	488.60	0.00	1.00	19.14	0.28
2692.0	55.61	0.21	460.00	0.00	1.00	18.96	0.28
2693.0	9.16	0.13	672.71	0.00	1.00	18.78	0.28
2694.0	9.62	0.14	606.51	0.00	1.00	18.65	0.28
2695.0	8.10	0.13	677.68	0.00	1.00	18.52	0.28
2696.0	2.74	0.08	1003.01	0.00	1.00	18.40	0.28
2697.0	3.71	0.11	588.36	0.00	1.00	18.32	0.28
2698.0	5.20	0.12	507.88	0.00	1.00	18.20	0.28
2699.0	2.11	0.10	614.34	0.00	1.00	18.09	0.28
2700.0	3.66	0.11	571.47	0.00	1.00	17.99	0.28
2701.0	4.18	0.12	532.68	0.00	1.00	17.88	0.28
2702.0	10.65	0.14	632.52	0.00	1.00	17.76	0.28
2703.0	20.46	0.16	512.29	0.00	1.00	17.62	0.28
2704.0	7.19	0.13	530.14	0.00	1.00	17.47	0.28
2705.0	6.18	0.13	556.43	0.00	1.00	17.35	0.28
2706.0	11.61	0.14	592.03	0.00	1.00	17.22	0.28
2707.0	5.26	0.11	751.18	0.00	1.00	17.08	0.28
2708.0	4.55	0.11	644.87	0.00	1.00	16.97	0.28
2709.0	4.07	0.11	559.29	0.00	1.00	16.86	0.28
2710.0	5.14	0.12	552.79	0.00	1.00	16.74	0.28
2711.0	2.70	0.09	794.29	0.00	1.00	16.63	0.28
2712.0	2.22	0.08	1025.20	0.00	1.00	16.55	0.28
2713.0	2.91	0.09	831.05	0.00	1.00	16.47	0.28
2714.0	2.49	0.10	666.53	0.00	1.00	16.38	0.28
2715.0	2.67	0.08	906.13	0.00	1.00	16.28	0.28
2716.0	6.68	0.10	876.52	0.00	1.00	16.19	0.28
2717.0	2.93	0.09	830.02	0.00	1.00	16.10	0.28
2718.0	3.71	0.11	642.99	0.00	1.00	16.00	0.28
2719.0	2.21	0.08	798.70	0.00	1.00	15.90	0.28
2720.0	2.97	0.09	770.83	0.00	1.00	15.81	0.28
2721.0	5.52	0.09	861.83	0.00	1.00	15.72	0.28
2722.0	4.78	0.10	775.30	0.00	1.00	15.63	0.28
2723.0	3.31	0.10	725.46	0.00	1.00	15.53	0.28
2724.0	3.67	0.10	722.76	0.00	1.00	15.43	0.28
2725.0	4.23	0.10	702.63	0.00	1.00	15.33	0.28
2726.0	4.67	0.10	752.41	0.00	1.00	15.23	0.28
2727.0	3.95	0.09	890.21	0.00	1.00	15.13	0.28
2728.0	12.43	0.15	536.73	0.00	1.00	15.03	0.28
2729.0	15.16	0.15	473.45	0.00	1.00	14.87	0.28
2730.0	8.38	0.13	550.14	0.00	1.00	14.73	0.28
2731.0	11.21	0.14	526.21	0.00	1.00	14.61	0.28

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2732.0	9.25	0.14	563.15	0.00	1.00	14.47	0.28
2733.0	14.78	0.15	495.80	0.00	1.00	14.33	0.28
2734.0	10.90	0.14	506.77	0.00	1.00	14.17	0.28
2735.0	5.80	0.12	660.94	0.00	1.00	14.03	0.28
2736.0	6.19	0.13	523.78	0.00	1.00	13.91	0.28
2737.0********		0.36	64.17	0.00	0.60	13.67	0.21
2738.0********		0.36	65.24	0.00	0.61	13.31	0.07
2739.0	2.51	0.10	688.75	0.00	1.00	13.09	0.00
2740.0	3.17	0.11	609.20	0.00	1.00	12.99	0.00
2741.0	2.82	0.10	627.43	0.00	1.00	12.89	0.00
2742.0	4.13	0.11	579.51	0.00	1.00	12.78	0.00
2743.0	2.49	0.09	768.12	0.00	1.00	12.67	0.00
2744.0	2.20	0.08	852.81	0.00	1.00	12.59	0.00
2745.0	1.58	0.07	976.27	0.00	1.00	12.51	0.00
2746.0	1.38	0.07	977.78	0.00	1.00	12.44	0.00
2747.0	1.90	0.08	845.09	0.00	1.00	12.37	0.00
2748.0	4.14	0.11	584.64	0.00	1.00	12.29	0.00
2749.0	5.57	0.12	541.86	0.00	1.00	12.16	0.00
2750.0	2.54	0.10	662.02	0.00	1.00	12.05	0.00
2751.0	3.26	0.11	607.47	0.00	1.00	11.95	0.00
2752.0	3.44	0.11	599.68	0.00	1.00	11.84	0.00
2753.0	4.50	0.12	561.87	0.00	1.00	11.72	0.00
2754.0	4.91	0.12	551.41	0.00	1.00	11.61	0.00
2755.0	7.57	0.13	494.58	0.00	1.00	11.49	0.00
2756.0	10.73	0.14	452.72	0.00	1.00	11.35	0.00
2757.0	7.98	0.13	484.75	0.00	1.00	11.21	0.00
2758.0	8.29	0.14	477.06	0.00	1.00	11.08	0.00
2759.0	9.76	0.14	458.04	0.00	1.00	10.94	0.00
2760.0	8.03	0.14	481.17	0.00	1.00	10.80	0.00
2761.0	6.76	0.13	499.76	0.00	1.00	10.67	0.00
2762.0	8.12	0.14	472.90	0.00	1.00	10.54	0.00
2763.0	9.47	0.14	451.72	0.00	1.00	10.40	0.00
2764.0	5.72	0.12	517.27	0.00	1.00	10.26	0.00
2765.0	6.95	0.13	490.87	0.00	1.00	10.13	0.00
2766.0	7.69	0.14	475.36	0.00	1.00	9.99	0.00
2767.0	8.27	0.14	465.84	0.00	1.00	9.86	0.00
2768.0	12.16	0.15	417.46	0.00	1.00	9.71	0.00
2769.0	12.25	0.15	413.63	0.00	1.00	9.56	0.00
2770.0	9.00	0.14	451.10	0.00	1.00	9.41	0.00
2771.0	9.64	0.14	444.80	0.00	1.00	9.27	0.00
2772.0	13.49	0.16	407.94	0.00	1.00	9.12	0.00
2773.0	12.55	0.15	415.91	0.00	1.00	8.96	0.00
2774.0	13.46	0.16	407.05	0.00	1.00	8.81	0.00
2775.0	15.29	0.16	393.38	0.00	1.00	8.65	0.00
2776.0	15.37	0.16	394.89	0.00	1.00	8.49	0.00
2777.0	14.05	0.16	404.32	0.00	1.00	8.33	0.00
2778.0	15.84	0.16	389.02	0.00	1.00	8.17	0.00
2779.0	21.46	0.18	357.22	0.00	1.00	8.00	0.00

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	SW CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2780.0	19.47	0.17	368.30	0.00	1.00	7.82	0.00
2781.0	32.56	0.20	313.55	0.00	1.00	7.65	0.00
2782.0	28.82	0.19	324.27	0.00	1.00	7.44	0.00
2783.0	15.51	0.16	393.11	0.00	1.00	7.26	0.00
2784.0	18.90	0.17	372.48	0.00	1.00	7.10	0.00
2785.0	27.04	0.19	334.61	0.00	1.00	6.92	0.00
2786.0	20.27	0.18	363.41	0.00	1.00	6.73	0.00
2787.0	11.48	0.15	427.90	0.00	1.00	6.56	0.00
2788.0	8.50	0.14	467.94	0.00	1.00	6.42	0.00
2789.0	9.26	0.14	460.31	0.00	1.00	6.28	0.00
2790.0	6.28	0.13	513.16	0.00	1.00	6.14	0.00
2791.0	6.41	0.13	511.21	0.00	1.00	6.01	0.00
2792.0	5.40	0.12	531.92	0.00	1.00	5.88	0.00
2793.0	7.73	0.13	488.03	0.00	1.00	5.76	0.00
2794.0	12.18	0.15	437.27	0.00	1.00	5.62	0.00
2795.0	11.48	0.15	446.00	0.00	1.00	5.47	0.00
2796.0	12.17	0.15	435.99	0.00	1.00	5.32	0.00
2797.0	13.25	0.15	422.94	0.00	1.00	5.17	0.00
2798.0	9.10	0.14	467.46	0.00	1.00	5.02	0.00
2799.0	10.88	0.15	450.06	0.00	1.00	4.88	0.00
2800.0	9.98	0.14	161.26	0.00	1.00	4.74	0.00
2801.0	11.30	0.15	157.89	0.00	1.00	4.59	0.00
2802.0	13.25	0.15	152.39	0.00	1.00	4.45	0.00
2803.0	15.93	0.16	145.56	0.00	1.00	4.29	0.00
2804.0	13.40	0.15	153.37	0.00	1.00	4.13	0.00
2805.0	13.19	0.15	155.89	0.00	1.00	3.98	0.00
2806.0	11.53	0.15	162.57	0.00	1.00	3.82	0.00
2807.0	14.77	0.16	151.53	0.00	1.00	3.67	0.00
2808.0	19.74	0.17	139.39	0.00	1.00	3.51	0.00
2809.0	19.20	0.17	139.81	0.00	1.00	3.34	0.00
2810.0	15.82	0.16	145.69	0.00	1.00	3.17	0.00
2811.0	16.80	0.16	142.90	0.00	1.00	3.01	0.00
2812.0	19.50	0.17	138.01	0.00	1.00	2.84	0.00
2813.0	10.46	0.14	163.40	0.00	1.00	2.67	0.00
2814.0	5.49	0.12	189.01	0.00	1.00	2.54	0.00
2815.0	5.12	0.12	191.37	0.00	1.00	2.41	0.00
2816.0	6.56	0.13	178.47	0.00	1.00	2.29	0.00
2817.0	7.90	0.13	170.70	0.00	1.00	2.16	0.00
2818.0	9.62	0.14	162.83	0.00	1.00	2.02	0.00
2819.0	11.10	0.15	157.57	0.00	1.00	1.88	0.00
2820.0	15.77	0.16	144.35	0.00	1.00	1.74	0.00
2821.0	19.38	0.17	137.15	0.00	1.00	1.57	0.00
2822.0	18.21	0.17	140.61	0.00	1.00	1.41	0.00
2823.0	18.50	0.17	142.01	0.00	1.00	1.24	0.00
2824.0	23.14	0.18	134.72	0.00	1.00	1.07	0.00
2825.0	36.53	0.20	116.72	0.00	1.00	0.88	0.00
2826.0	25.62	0.18	125.46	0.00	1.00	0.68	0.00
2827.0	6.80	0.13	166.72	0.00	1.00	0.52	0.00

DEPTH FEET	PERM. INDEX	EFFECTIVE POROSITY %	SHALE VOL. %	GAS INDEX	Sw CH %	CUMULATIVE POR-FT	INTEGRATIONS HY-FT
2828.0	2.62	0.10	197.96	0.00	1.00	0.40	0.00
2829.0	0.55	0.08	271.00	0.00	1.00	0.30	0.00
2830.0	2.12	0.10	210.40	0.00	1.00	0.22	0.00
2831.0	0.44	0.07	282.73	0.00	1.00	0.13	0.00
2832.0	0.17	0.06	323.47	0.00	1.00	0.07	0.00
2833.0	0.00	0.04	537.87	0.00	1.00	0.02	0.00

CONFIDENTIAL

DIVISION OF OIL, GAS, AND MINING

P L U G G I N G P R O G R A M

NAME OF COMPANY: AMOCO PRODUCTION COMPANY

WELL NAME: West Rozel St. Unit #1

Sec. 23 T. 8N R. 8W, County Box Elder

Verbal approval given to plug the above referred to well in the following manner:

Total Depth: 8,500'

Casing Program:

20" at 362' cemented to surface
95/8" at 2,819' cemented to surface

A cast iron bridge plug was set at 400' and cemented to surface.

Formation Tops:

NOT KNOWN

Plugs Set as Follows:

The well was already plugged back to 2,430'.

Date: MARCH 5, 1979 Signed:

Form OGC-1b

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.: ML-28640

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED MAR 8 1979 DIVISION OF OIL, GAS, & MINING

1. OIL WELL ☐ GAS WELL ☐ OTHER Wildcat (Plug X Abandon)

7. UNIT AGREEMENT NAME: West Rozel State Unit

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P. O. Box 17675, Salt Lake City, Utah 84117

9. WELL NO.: # 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: C-NW/4 SW/4 Section 23,660' FWL 1980' FEL

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 23-T8N-R8W

14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
43-003-30003	4199'Lake Elevation (4223' RKB)	Box Elder	Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	XX	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Plug X Abandon			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 3-8-79
BY: M. J. Minder

Well drilled to a total depth of 8500'
No commercial hydrocarbons encountered
9 5/8" 36# Surface casing set @ 2819

Propose to Plug X Abandon as follows:
Set 250 Sx. CL "G" W/0.75% CFR-2 Cement plug on top of retainer to be set @ approximately 2000'

Set 50 Sx CL "G" w/0.75% CFR-2 Cement Plug 1132'-1000'
Set 140 Sx CL "G" w/0.75% CFR-2 Cement Plug on top of CIBP to be set @ 400'

Verbal approval obtained from Leon B. Feight of the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining to J. E. Stepinski on 3/2/79 4:30 p.m.

18. I hereby certify that the foregoing is true and correct

SIGNED D. D. Davidson TITLE District Adm. Supervisor DATE 3/5/1979

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGCC-3

Release date: 10-2-79

TIGHT HOLE

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED APR 6 1979

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: P. O. Box 17675, Salt Lake City, UT 84117

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: C-NW/4 SW/4 Section 23, 660' FWL 1980' FEL
At top prod. interval reported below: SAME
At total depth: SAME

5. LEASE DESIGNATION AND SERIAL NO.: ML-28640

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: West Rozel State Unit

8. FARM OR LEASE NAME:

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 23-T8N-R8W

14. PERMIT NO.: 43-003-30003 — DATE ISSUED:

12. COUNTY OR PARISH: Box Elder — 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-23-78	2-2-79	N/A 3-2-79 P&A	4199 Lake 4223 RKB	N/A

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8500'	Surface	N/A	→	To TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
N/A Well is plugged and abandoned

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: HDT, CYBERLOOK
Velocity Survey, Dual Laterolog, DIL-SFL-GR, BHC-GR-TTI, CNL-FDC-GR

27. WAS WELL CORED: Yes

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	133#	362' KB	Driven		35'
9 5/8"	36# K-55	2819'	12 ¼"	1400Sx lite x 800Sx Cl "G"	140'

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A		

31. PERFORATION RECORD (*Interval, size and number*)
2486'-2532' 4 JSPF .5"
2280'-2410' 4 JSPF .5"
2280'-2282' 4 JSPF .5"

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
	SEE ATTACHMENT

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
N/A	P x A	P x A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
N/A	N/A						

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
N/A						

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
N/A Well is plugged and Abandoned

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS
32. Acid, Shot, Fracture Cement Squeeze 37. Summary of Porous Zones.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Dee Davidson TITLE Dist. Adm. Supervisor DATE 4/3/79

*(See Instructions and Spaces for Additional Data on Reverse Side)

ATTACHMENT
WELL COMPLETION OR RECOMPLETION REPORT AND LOG
West Rozel State Unit #1

32. ACID, SHOT FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5635-6205'	Set 500 Sx CI "G" plug (top of fish 6219')
2486-2532'	25 MCF N_2 Pad, 2000 gal 15% HCL and 1000 SCF/BBL N_2
2486-2532'	Set retainer @ 2375 and squeeze perfs w/100 Sx CL "G"
2280-2410'	Acidize w/40 MCF N_2 Pad, 4000 gal 15% HCL w/20 gal HAI-75, 8 gal 5-NEA w/1000 SCF/BBL N_2

37. SUMMARY OF POROUS ZONES:

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS NAME	MEAS. DEPTH	TRUE VERT. DEPTH
	2157'	2162'	Core #1: Cut 5; Rec 4'	Salt	2136'	
	2128'	2220'	DST #1: IO-Good 3" water blow to 1" after 15 min, FO-Tools plugged misrun	Miocene	3426'	
				Paleozoic	6240'	
	2131'	2352'	DST #2: IO-Strong blow to 6# decrease to 1# at end, FO-Strong blow to very wk.			
	2115'	2430'	DST #3: IO-Blow to bottom of bucket @ max. 10#, Died in 1 hr. to 0 (No initial open or shut-in) Final SI 2 hrs. Rec 1208' gas cut mud. (top recorder plugged)			
	2819'	2995'	DST #4: IO-10 min Blow to 50 #PSI, FO-Weak Blow			

Lost bit @ 6936' w/drlg jars, 20 drill collars, 2 jts drill pipe and 27' stub in hole Top of fish 6219' Set 500 Sx CI "G" cement plug est. top 5365' and prep to side track around junk. Kick-off point @ 6141 and continue drilling

7998' 8005' Core #3: Cut 7' Rec 7' Dolomite

Plugging record as follows:
Set 300 Sx Cl "G" A Cement plug 5820' - 6200'
Set 300 Sx Cl "G" A cement plug 3975' - 4500'
Set 360 Sx CL "G" A cement plug 3285' - 2655'
Dress hole to 2702' and set BP @ 2697'. Set cement retainer @ 1810' and pump 250 Sx CI "G" Cement plug on top. Set bridge Plug @ 400' and set 400 Sx Cl "G" Cement plug to surface.

Form OGC-1b

TIGHT HOLE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.: ML-28640

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED APR 10 1979 DIVISION OF OIL, GAS, & MINING

1. OIL WELL ☐ GAS WELL ☐ OTHER: Plug and Abandon

7. UNIT AGREEMENT NAME: West Rozel State Unit

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P. O. Box 17675 Salt Lake City, UT 84117

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface

C-NW/4 SW/4 Section 23, 660' FWL 1980' FEL

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23, T8N-R8W

CONFIDENTIAL

14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
43-003-30003	4199' Lake Elev. (4[illegible]' RKB)	Box Elder	Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	X
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Well drilled to a total depth of 8500'
Commercial quantities of hydrocarbons not encountered

9 5/8" Surface casing set @ 2819'

Plugging record as follows:
Set cement retainer @ 1810' and pump 250 Sx Cl "G" cement plug on top
Set Bridge Plug @ 400'. Cut and pull 140' 9 5/8" Surface Casing and 35'
20" conductor pipe. Set 400 Sx Cl "G" Cement plug on top of Bridge Plug to surface.

Log tops as follows:
Salt 2136
Miocene 3426
Paleozoic 6240

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Dist. Adm. Supervisor DATE 4/3/79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side